

### **ABSTRACT OF THE DISCLOSURE**

An apparatus is provided for simulating and monitoring a respiration pattern of a human. The apparatus generally includes a reservoir having an outlet, an actuator disposed in the reservoir for moving fluid in and out of the reservoir, and a control unit coupled to the actuator for controlling the actuator to simulate and monitor a respiration pattern of a human. Also, a method is provided for simulating and monitoring a respiration pattern of a human. The method includes steps of generating a waveform defining the respiration pattern and controlling an actuator to move fluid in and out of a reservoir based on the waveform. The apparatus and method can accurately simulate and monitor a respiration pattern of a human, especially an infant and a young child, and offer a flexibility to simulate variety of respiration patterns.